

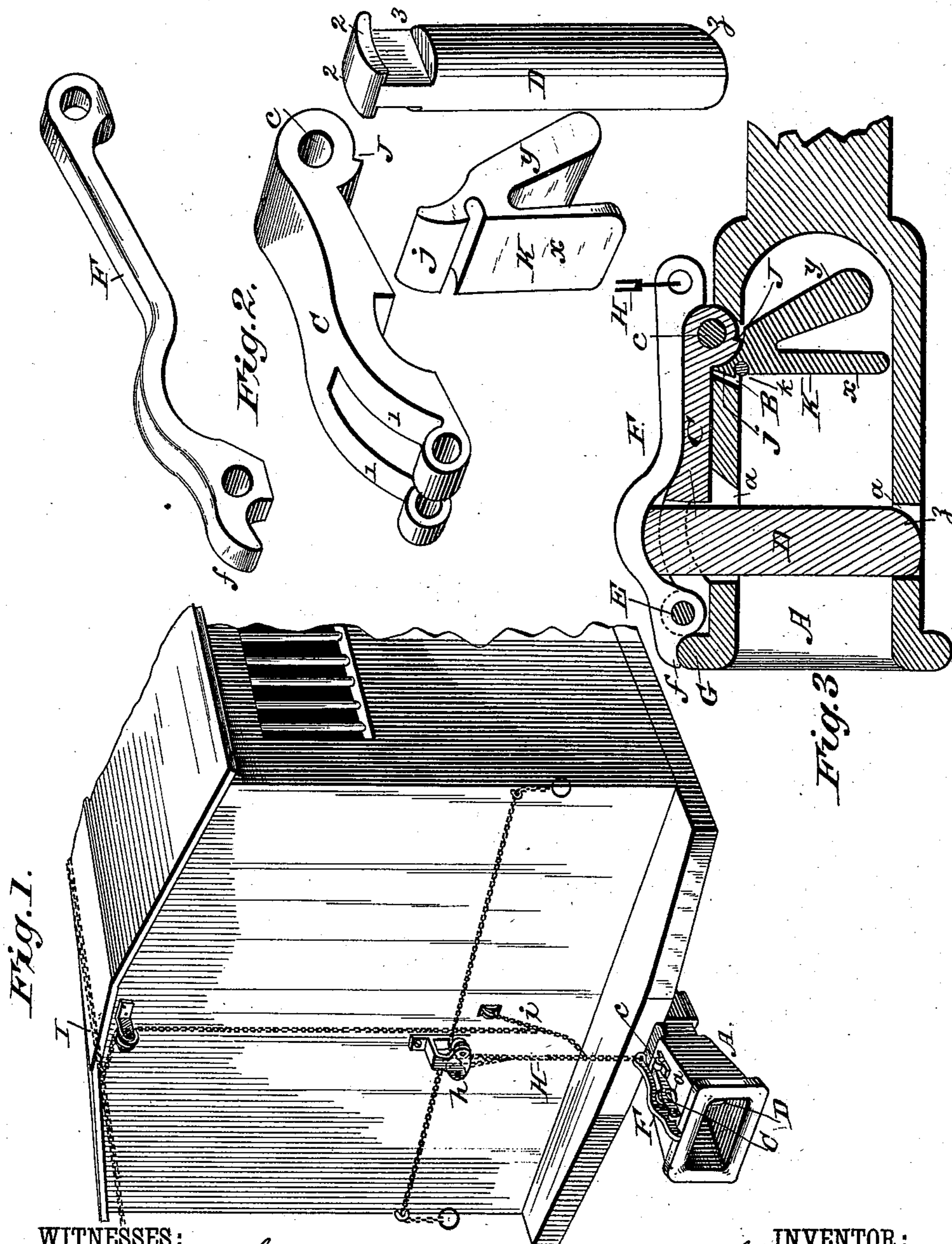
(No Model.)

H. GALLAGER.

CAR COUPLING.

No. 364,007.

Patented May 31, 1887.



WITNESSES:

WITNESSES:
Fred G. Dieterich
P. B. Surpin.

INVENTOR:

INVENTOR:
Henry Gallager
BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY GALLAGER, OF SAVANNAH, GEORGIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 364,007, dated May 31, 1887.

Application filed April 14, 1887. Serial No. 234,779. (No model.)

To all whom it may concern:

Be it known that I, HENRY GALLAGER, of Savannah, in the county of Chatham and State of Georgia, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention is an improved car-coupling, and seeks to provide a simple novel construction whereby the coupling and uncoupling of cars may be easily effected without the brakeman or other operator going between the cars.

The invention consists in the novel construction and combinations of parts, as hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of one end of a car provided with my improvement. Fig. 2 is a detail perspective of the several operative parts, the draw-head being shown in dotted lines; and Fig. 3 is a vertical longitudinal section drawn alongside the coupling-pin, main lever, handle-lever, and trip.

The invention is intended especially for use on freight-cars. I employ a draw-head, A, of ordinary form, having pin-openings *a a*, and being provided through its top wall, in rear of said pin-openings, with an opening, B. The main lever C has the pin D suspended from its forward end, while its rear end is pivoted at *c* to the draw-head.

In connecting the pin D and lever C, I bifurcate the forward end of the lever C, forming arms 1 1, the upper sides of which are rounded, forming a curved seat for the head or lugs 2 of the pin D, which latter has grooves or mortises 3 in its opposite sides to receive the arms 1, and forming the shoulders or lugs 2, which bear on said arms. By the described construction the pin may be raised by the movement of the main lever, and said pin has a limited movement or adjustment along the lever to compensate for the variation in lines of movement of said parts. The pin is held in place between the arms 1 by means of bolt E, extended between the forward ends of such arms, and said bolt also, by preference, forms the pivot of handle-lever F, which has a forward extension at *f* beyond such pivot E. This extension *f* pivots on the upwardly-projected rib or flange G of the draw-head, as shown, and the underside of lever F is con-

formed to the upper side of the main lever and pin, so the parts when in coupled position will rest snugly together, as is illustrated in the drawings. A cord, H, which may be a linked chain, wire, textile string, or other suitable construction, connects with the handle-lever, is carried up over a guide-pulley, *h*, and then extends outward to the side of the car.

In practice it is designed to connect all the couplings of a train to a main cord or connection, I, leading at one end to the locomotive and at the other end into the conductor's car, so that in case of accident either one of said officers can instantly detach the several cars.

It is also designed to provide a cord, *i*, connected with the coupling of the conductor's car, and extended thence into said car, so, in case of accident, the conductor's car can be detached from the rest and instantly braked to avoid injury to the occupants of said car.

Near its rear end the main lever has a shoulder, J, and a trip, K, is pivotally supported at *k*, and has a portion or extension, *j*, arranged to engage the shoulder J of the main lever. This trip is so formed that its normal tendency is to swing into position to cause its part *j* to engage the shoulder J, and is preferably formed with a front or impact wing, *x*, and a rear or weight wing, *y*, as shown in Figs. 2 and 3.

The operation is simple and will be readily understood.

When in coupled position, as shown in Fig. 2, and it is desired to uncouple, it will be seen that the starting movement is effected through the aid of part F, by which a strong leverage may be obtained to start the pin. When once started, the pin may be moved easily, as the link will bear against the beveled or rounded lower end of the pin at *z*, and thereby assist in its upward movement. When the pin is raised to uncoupled position, the trip will engage the shoulder J and secure the parts in uncoupled position until an entering link engages and releases the trip, allowing the main lever and the pin to fall, as will be obvious from the drawings.

Having thus described my invention, what I claim as new is—

1. The combination of the main lever, pivotally supported at its rear end, the pin sup-

pended from the forward end of the said lever, and the handle-lever, pivoted to the forward end of the main lever and having an extension, substantially as set forth.

5 2. The combination of the pivoted main lever having its free end formed with arms 1, and the pin having its upper end fitted between said arms and provided with shoulders bearing above and below the same, whereby
10 the lever may serve to positively move the pin up or down, substantially as set forth.

3. The combination of the draw-head, the lever C, pivoted and having a shoulder, as J, on its under side adjacent to said pivot, the
15 pin supported on the free end of the lever, and the trip pivoted and wholly incased within the draw-head and having its upper end arranged to engage the shoulder J, all substantially as set forth.

20 4. The combination of the main lever, pivoted at one end and having its other end bifurcated, the pin suspended from the main lever, the bolt E, serving to retain the pin on the main lever, and the handle-lever pivoted
25 on bolt E, substantially as set forth.

5. The draw-head having projection G, combined with the main and handle levers, the pin, the bolt E, and the trip, substantially as set forth.

6. The combination of the draw-head, the lever C, having arms 1 at its forward end and having its rear end pivoted to the draw-head, and provided near such rear end with shoulder J, the pin D having grooves 3 and fitted
30 between the arms 1 of lever C, and the trip pivoted and incased within the draw-head, and formed with impact-wing x and weight-wing y , in rear of said impact-wing, substantially as set forth. 35

7. The improvement in car-couplings, comprising the lever having shoulder J, the pin supported by said lever, and the trip formed with an impact-wing, x , and with a weight-wing, y , arranged in rear of and separated from the impact-wing, substantially as set forth. 40 45

8. The car-coupling herein described, comprising the main lever having arms 1 and shoulder J, the pin having head 2, the lever F, having extension f , and the trip having
50 portion j and wings x and y , substantially as set forth.

HENRY GALLAGER.

Witnesses:

HENRY PRECHT,
T. A. ZOOCKS.